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EXAMINER	
ORTIZ, BELIX M	

ART UNIT	PAPER NUMBER
2164	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/753,855	CHU-CARROLL ET AL.	
	Examiner	Art Unit	
	Belix M. Ortiz	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 15-30,36 and 38 is/are allowed.

6)☒ Claim(s) 1-14, 31-35, 37,39 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. In response to communications files on 15-October-2004, the specification of the disclosure, claim 3 is amended per applicant's request. Therefore, claims 1-39 are presently pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-14, 31-35, 37, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Hanzek (U.S. patent 6,654.726).

As to claim 1, Hanzek teaches a method performing dynamic parsing of structured documents (see figure 9 and column 14, lines 46-50), the method comprising:

obtaining a first structured document (see figure 9 and characters 902 and 904);

identifying a document type for the first structured document (see figure 9, character 904);

finding an extension component to process the first structured document (see figure 9 and characters 904 and 906); and

invoking the extension component upon the first structured document to generate a usable in-memory data structure (see figures 9, characters 612 and 908 where is read on "search result").

As to claim 2, Hanzek teaches where the structured document is written in XML (see figures 9 and 10 and column 14, lines 34-38).

As to claim 3, Hanzek teaches a method for generating heterogeneous data structures (see figure 9), the method comprising:

having a first program and a second program, the first program having a set of structured data in a first data structure usable only by the first program(see

figure 9, characters 902 and 904, where "first program" is read " listener" and "second program" is read "parser");

sending a first document including data from the first data structure to the second program (see figure 9, characters 902 and 904); and

employing dynamic parsing to parse the data from the first data structure of the first document into a second data structure for use by the second program (see figure 9, where the dynamic parsing and parses the message into a second data structure sent to the dispatcher).

As to claim 4, Hanzek teaches the method used for e-commerce (see column 1, lines 52-53).

As to claim 5, Hanzek teaches where the step of sending includes obtaining a request and responding to the request (see column 1, lines 60-67).

As to claim 6, Hanzek teaches where the step of parsing performed by the second program (see figure 9).

As to claim 7, Hanzek teaches a method for linking heterogeneous data structures (see figure 9), the method comprising:

providing a first program with a first set of data in a first data structure (see figure 9, character 902, where the first program is the listener and it receive first data (XML data) in a first format (XML message));

providing second program with the first set of data in a second data structure (see figure 9, character 904, where the second program is the parser and it receives first set of data (XML data) in a second format (XML message));

receiving information indicating a change in one of the first and the second data structures to a third data structure (see figure 9, character 906, where the dispatcher receives the changes first data structure and further changes the data into a third data structure (sear parameters)); and

modifying the one of the first and the second data structure into fourth data structure in correspondence with the third data structure (see figure 9, characters 612 and 908, where these further modified by searcher to produce a fourth data structure (search result)).

As to claim 8, Hanzek teaches wherein the step receiving information includes the first program sending the information (see figure 9, character 902, where the first program is the listener and it receive first data (XML data) in a first format (XML message)).

As to claim 9, Hanzek teaches a method for linking heterogeneous data structures (see figure 9), the method comprising:

providing a first program with a first set of data in a first data structure (see figure 9, character 902, where the first program is the listener and it receive first data (XML data) in a first format (XML message));

providing second program with the first set of data in a second data structure (see figure 9, character 904, where the second program is the parser and it receives first set of data (XML data) in a second format (XML message));

receiving information indicating a change in one of the first and the second data structures to a third data structure (see figure 9, character 906, where the dispatcher receives the changes first data structure and further changes the data into a third data structure (sear parameters)); and

modifying the one of the first and the second data structure into fourth data structure in correspondence with the third data structure (see figure 9, characters 612 and 908, where these further modified by searcher to produce a fourth data structure (search result)).

As to claim 10, Hanzek teaches wherein the step of receiving information comprises the first program sending the information (see figure 9, character 902, where the first program is the listener and it receive first data (XML data) in a first format (XML message)).

As to claim 11, Hanzek teaches an architecture neutral system for building clients that access a legacy system, the neutral system (see column 8, lines 60-67 and column 9, lines 1-3) comprising:

an association module for associating each data object in the legacy system with a unique ID and with a location in a virtual table data structure (see abstract and column 31, lines 1-9);

receiving module for receiving a request from a client for the legacy system to provide information about a requested property specific data object identified by the unique ID (see column 31, lines 1-18);

an identifier module for identifying requested property by a name (see column 16, lines 52-58);

a program for module for providing a query handler extension for each property which a client can request (see figure 13);

a query handler extension module for producing value representing the location in the virtual table data structure (see figure 13); and

a transmitting module for transmitting the value to the client using a communication system, whereby the client can access the object in the virtual table (see figure 34).

As to claim 12, Hanzek teaches wherein the query handler extension module includes a program executable on the identified object (see figure 11).

As to claim 13, Hanzek teaches a method for building clients that access a legacy system, the method (see column 8, lines 60-67 and column 9, lines 1-3) comprising:

associating each data object in the legacy system with a unique ID (see abstract and column 31, lines 1-9);

making a request from a client for the legacy system to provide information about a requested property specific data object identified by the unique ID (see column 31, lines 1-18);

identifying requested property by a name (see column 16, lines 52-58);

providing a query handler extension for each property which a client can request (see figure 13);

the query handler extension producing value representing location in the data object in a virtual table data structure (see figure 13); and

transmitting the value to the client for client queries regarding the data object (see figure 34).

As to claim 14, Hanzek teaches wherein the query handler extension comprises a program executable on the identified object (see figure 11).

As to claim 31, Hanzek teaches a method of creating replicas in computing environment comprising least a first and a second machine (see figure 7B, characters 601 and 632), the method comprising:

moving data from a first machine to a second machine to form the replica (see figure 8, 10, and 11); and

communicating an updating event on the first machine to the second machine to keep the data consistent, the updating event being associated with the data (see column 2, lines 19-30).

As to claim 32, Hanzek teaches wherein the replica includes only a portion of the data (see column 2, lines 25-26).

As to claim 33, Hanzek teaches wherein the data is in a first form on the first machines and the replica is transformed into a second form on the second machine (see figure 8, 10 and 11 and column 14, lines 26-31).

As to claim 34, Hanzek teaches the method as recited further comprising communicating an updating event on the second machine to the first machine keep the data consistent (see column 14, lines 26-33).

As to claim 35, Hanzek teaches wherein the step of moving includes responding to least one query (see column 3, lines 61-67).

As to claim 37, Hanzek teaches a method for developing an interactive application (see figure 8, 10, and 11), the method comprising:

implementing server program containing at least code for parsing a first data structure (see column 14, lines 46-55);

implementing dynamic parsing on a first data structure to form a second data structure (see column 14, lines 44-48);

linking the first and second data structures (see figure 9 and 10); and

providing a client application which employs the processes of linking and parsing (see figure 9 and 10).

As to claim 39, Hanzek teaches a computing architecture for providing replicated data structures (see column 14, lines 26-28) comprising:

a server comprising an event management component having at least one event handler, a query management component having at least one query handler and at least one server database location for storing server data (see column 7, column 46-54); and

a client comprising a query generator, an event management component having at least one event handler, a user interface, and a dynamic parsing component with at least parser extension for accessing the server data (see column 7, lines 44-64 and column 13, lines 30-37).

Allowable Subject Matter

4. Claims 15-30, 36, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, Hanzek (U.S. patent 6,654,726) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

An architecture neutral system for building clients that access a legacy system, the neutral system comprising:

at least one client location;

at least one server location;

bi-directional communication link connecting each of the at least one client and server for transmitting two kinds of messages, a first message being a synchronous query/response, and a second message being an asynchronous subscription based event notification, whereby arbitrary data structure a can be rendered into a standard communication format applying the contents of an asynchronous subscription based event notification for providing synchronous query/response communications, as claimed in claim 15.

Claims 16-20 are objected to as being dependent from the objected to dependent claim 15.

The prior art of record, Hanzek (U.S. patent 6,654,726) do not disclose, teach, or suggest the claimed limitations of (in combination with all other features in the claim):

A method for building clients that access a legacy system,

the method comprising:

forming a simple bi-directional communication link between each of the clients and a server; and

transmitting along the communication link two kinds messages, a first message being synchronous query/response, and a second message being an asynchronous subscription based event notification, to allow arbitrary data structures to be rendered into a standard communication format, as claimed in claim 21.

Claims 22-30 and 38 are objected to as being dependent from the objected to dependent claim 21.

Response to Arguments

6. Applicant's arguments filed 6- April- 2004 with respect to the rejected claims in view of the cited references have been fully considered but they are not found persuasive:

In response to applicants' arguments that "Hanzek, provides no to teaching of identifying a document type", the arguments have been fully considered but are not deemed persuasive, because Hanzek teaches "FIG. 9 is a locate server message flow diagram 900 according to an embodiment of the present invention. A listener 902 is preferably a secured XML listener on port 80 of locate server 821 that accepts XML messages sent from requesting presentation applications. Listener 902 provides support for authenticating whom the request is from using private key infrastructure (PKI) encrypted user credentials, for example. Based on the requester's identity, listener 902 applies pre-assigned business rules to the request to allow or deny access to specific functions and data sets supported by locate server 821. Listener 902 then sends the message to a parser 904" (see Hanzek., column 14, lines 34-45).

In response to applicants' arguments that "Hanzek does not provide any teaching of finding an extension component to process a structured document", the arguments have been fully considered but are not deemed persuasive, because Hanzek teaches "The listener object 972 parses the request XML messages received from the web sites and interprets the information for the

BusinessObject. The listener object 972 is also operable to generate the XML reply messages", (see Hanzek, column 15, lines 62-65).

In response to applicants' arguments that "Hanzek does not teach invoking a selected extension component to generate a data structure", the arguments have been fully considered but are not deemed persuasive, because Hanzek teaches "In XML, tags are used to demarcate data content and data fields so that the content can be interpreted and manipulated. In XML, ELEMENT TYPE tags are used to define the various fields or parameters, a NAME tag sets out the name of the field, and a CONTENT tag sets out the data content of the field. Nested ELEMENT TYPE may be defined to describe a more complex data structure. For example, <ElementType name="Vehicle" content="eltOnly" order="seq"> <element type="Identification"/> <element type="Status"/> <element type="DealerCode"/> <element type="ConfiguredModel"/> <element type="Warranty"/> </ElementType&gt", (see Hanzek, figure 9, character 612 and 908 where is read on "search result" and column 16, lines 52-67).

In response to applicants' arguments that "Hanzek does not teach a method for generating heterogeneous data structures", the arguments have been fully considered but are not deemed persuasive, because Hanzek teaches the first program is the listener (902). It receives structured data on the form of XML

messages. The second program is the parser (904). It employs the dynamic parsing and parses the message into a second data structure sent to the dispatcher, (see Hanzek, figure 9).

In response to applicants' arguments that "Hanzek does not teach having a first program and a second program", the arguments have been fully considered but are not deemed persuasive, because Hanzek teaches the first program is the listener (902). It receives structured data on the form of XML messages. The second program is the parser (904). It employs the dynamic parsing and parses the message into a second data structure sent to the dispatcher, (see Hanzek, figure 9).

In response to applicants' arguments that "Hanzek does not teach that a third data structure be create by changes to either a first or a second data structure and that, in response to the changes, a fourth data structure is automatically created", the arguments have been fully considered but are not deemed persuasive, because Hanzek teaches the first program is the listener and It receives (XML data) in a first format (XML message). The second program is the parser and it receives the first set of data (XML data) and converts it to a second data structure (message content). The dispatcher receives the changes first data structure and further changes the data into a third data structure

(search parameters). These are further modifies by the searcher to produce a fourth data structure (search results), (see Hanzek, figure 9).

In response to applicants' arguments that "Hanzek does not suggest associating each data object with a unique ID and with a location in a virtual table data structure", the arguments have been fully considered but are not deemed persuasive, because Hanzek teaches FIGS. 37A and 37B is a diagram of an embodiment of the user session message format for transmitting user online session data to the report process. A user session tag 2100 is the top-level tag of the message. A session start parameter 2102 includes session ID 2103, a visitor descriptor 2104, a source application identifier 2105, a browser indicator 2106, an IP (Internet protocol) address 2107 of the user, and a reference 2108 field with additional description 2109 and IP address 2110 parameters, (see Hanzek, column 31, lines 1-9).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory

period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081. The examiner can normally be reached on moday-friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 571-272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bmo

November 23, 2004

SAM RIMELL
PRIMARY EXAMINER